

ELECTRONIC TUBE REFERENCE

XN1XN3

Nixie electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
NIXIE

Combined XN1/XN3 cold-cathode numerical-indicator designation, cross-referenced to the RFT Z5700M display family.

GENERAL CHARACTERISTICS

BASE DESIGNATION	Wire lead	BASE PINS	–
NOMINAL HEATER	– / –	PARALLEL HEATER	– / –
HEATING	Indirect; cold cathode	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Nixie	
MAXIMUM CATHODE CURRENT	2.5 mA
MINIMUM REGULATOR CURRENT	1.5 A
MAXIMUM REGULATOR CURRENT	2.5 A
STARTING VOLTAGE	150 V
MAINTAINING VOLTAGE	140 V
Cold-cathode display section; promoted starting/maintaining voltages and current range are published for comparable RFT type Z5700M.	

XN1/XN3 is a cold-cathode numeric or character indicator tube listed in the supplied German comparison catalog as comparable to RFT type Z5700M. The catalog publishes 150 V anode striking, 140 V maintaining, 120 V extinction, a 1.5-2.5 mA cathode-current range, and associated display and mechanical data for that RFT type. The source explicitly cautions that comparable tubes are not necessarily identical, so these mapped RFT values are retained as comparison data rather than asserted as exact original-manufacturer ratings.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 Nixie RFT

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1971 NIXIE RFT

Section 1 · Nixie

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Comparable RFT Type	Z5700M	Catalog cross-reference; comparable types are not guaranteed identical
Minimum Operating Supply Voltage	170 V	Published for comparable RFT type Z5700M
Cathode Current Minimum	1.5 mA	Published for comparable RFT type Z5700M
Cathode Current Maximum	2.5 mA	Published for comparable RFT type Z5700M
Peak Cathode Current	12 mA	Published for comparable RFT type Z5700M
Ambient Temperature Minimum	-50 °C	Published for comparable RFT type Z5700M
Ambient Temperature Maximum	70 °C	Published for comparable RFT type Z5700M
Displayed Symbols	0 to 9	Published for comparable RFT type Z5700M
Reading Direction	side	Published for comparable RFT type Z5700M
Symbol Height	13 mm	Published for comparable RFT type Z5700M
Maximum Viewing Distance	8 m	Published for comparable RFT type Z5700M
Mounting Orientation	Wire 7 facing front	Published for comparable RFT type Z5700M
Maximum Bulb Height	47.6 mm	Published for comparable RFT type Z5700M
Maximum Bulb Diameter	19 mm	Published for comparable RFT type Z5700M

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Striking Voltage	150 V	Published for comparable RFT type Z5700M
Anode Maintaining Voltage	140 V	Published for comparable RFT type Z5700M
Anode Extinction Voltage	120 V	Published for comparable RFT type Z5700M

An independent reference for electronic tubes, vacuum tubes,
and their source documents.

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